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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,738	07/14/2003	Beverly B. Renshaw	14397	3603

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EXAMINER

BELT, SAMUEL E

ART UNIT PAPER NUMBER

3746

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/617,738	Applicant(s) RENSHAW, BEVERLY B.	
	Examiner Samuel E. Belt	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>07/14/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 7/14/2003 is acknowledged. Since submission complies with 37 CFR 1.97 and 1.98, the examiner has considered the references listed therein.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson et al. (U.S. Patent 2,382,421).

Johnson et al. disclose a hydraulic gas compressor comprising: a closed vessel (Figure 3, item 15) having a gas inlet means (Figure 3, item 21), liquid inlet means (Figure 3, between items 16 & 23) and liquid outlet means (Figure 3, item 23); an open

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vessel (Figure 1, item 51), arranged in vertical spaced relationship below said closed vessel, and having liquid inlet means (Figure 1, item 54), gas outlet means (Figure 1, item 65) and liquid outlet means (Figure 1, item 57); tubular means (Figure 1, item 22) between said liquid outlet means in said closed vessel and said liquid inlet means in said open vessel so as to provide a fluid flow path there between; pump means (Figure 1, item 12) between said liquid outlet means in said open vessel and said liquid inlet means in said closed vessel arranged so as to circulate liquid from said open vessel to said closed vessel; and aerator means (Figure 1, item 30) in said closed vessel arranged so as to entrain gas from said gas inlet means in said liquid flowing in said fluid flow path between said closed vessel and said open vessel; wherein said liquid is water and said gas is air (column 1, lines 1+).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. (U.S. Patent 2,382,421) in view of McGraw-Hill Book Company (Mechanical Engineers Handbook, 1941, pages 1914-1915).

In regard to claim 2 Johnson et al. sets forth a device as described above, which is substantially analogous to the claimed invention. The Johnson et al. device differs from the claimed invention in that there is no explicit teaching of the tubular means comprising a pipe in the range of 20-40 feet long. McGraw-Hill Book Company teaches a hydraulic compressor having a tubular means with a water head that is 70 feet and under (Page 1914).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to modify the Johnson et al. device by using a tubular means as taught by McGraw-Hill Book Company, in order to advantageously control the pressure generated by the system.

In regard to claim 3 Johnson et al. sets forth a device as described above, which is substantially analogous to the claimed invention. The Johnson et al. device differs from the claimed invention in that there is no explicit teaching of using a pump motor in the range of 12-15 horsepower but it is well settled in the art that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art, In Re Aller, 105 USPQ 233 such that one skilled in the art would have been motivated to chose a pump motor which was suitable for delivering water to the liquid inlet of the closed vessel (column 2, lines 1+).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Richardson (US Patent 4,797,563) discloses a power plant.

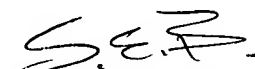
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel E. Belt whose telephone number is (571) 272-7820. The examiner can normally be reached on M-F, 8 - 4:30EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Thorpe can be reached on (571) 272-4444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SEB


TAE JUN KIM
PRIMARY EXAMINER


Samuel E. Belt
03/30/2006